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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,863	01/16/2002	Lawrence D. Bergman	YOR920010077	5124

7590 04/05/2004

Robert P. Tassinari, Jr.  
Intellectual Property Law Dept.  
IBM Corporation  
P.O. Box 218  
Yorktown Heights, NY 10598

EXAMINER

RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
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2175

3

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/047,863

Applicant(s)

BERGMAN ET AL.

Examiner

Sam Rimell

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,8-10 and 13 is/are rejected.
- 7) ☒ Claim(s) 4,5,7,11,12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

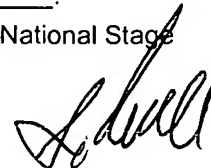
## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All . b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**SAM RIMELL**  
PRIMARY EXAMINER

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Art Unit: 2175

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 8-10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Horton et al. (U.S. Patent 6,421,622).

Claim 1: Horton et al. discloses an apparatus (FIG. 2) and a base station (FIG. 6). The apparatus is a device utilizing sensors along roll pitch and yaw axes. The base station is a factory that calculates calibration data. A data acquisition controller (21) controls the operation of physical parameter sensors (9, 10, 11, 13, 14, 15, 17) and forwards the data for storage in the EPROM (24). A data transmitter (port 25) communicates with a base station (FIG. 6) to request and download factory calibration data. The processor (23) which is in-situ on the apparatus and reads as a decision support module. This decision support module (23) performs three functions: (1) The decision support module (23) obtains data representing physical parameters, such as gyro data, acceleration data and temperature. (2) Assigns priorities (weights) to corrective factors associated with the data, such as bias, scale, factor, non-linearity, and (3) Communicates with the base station to contact the base station and receive feedback from the base station in the form of calibration data. The application of calibration data derived from the base station is considered an adjustment to the utility of the raw data obtained from the sensors on board the apparatus.

Claim 2: The progressive decision support module makes use of a model (FIG. 7) The model performs calculations to adjust measurable parameters, such as calibrated gyro rates or corrective rate signals.

Claim 3: The model considers one or more variables, such as calibrated gyro rates or corrective rate signals.

Claim 6: The calibrated gyro rates are variables that are associated with weights. The weights are the weighting factors used for calibration, namely bias, scale factor, non-linearity and misalignment.

Claim 8: See remarks for claim 1.

Claim 9: See remarks for claim 2.

Claim 10: See remarks for claim 3.

Claim 13: See remarks for claim 6.

Claims 4, 5, 7, 11, 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.



Sam Rimell  
Primary Examiner  
Art Unit 2175